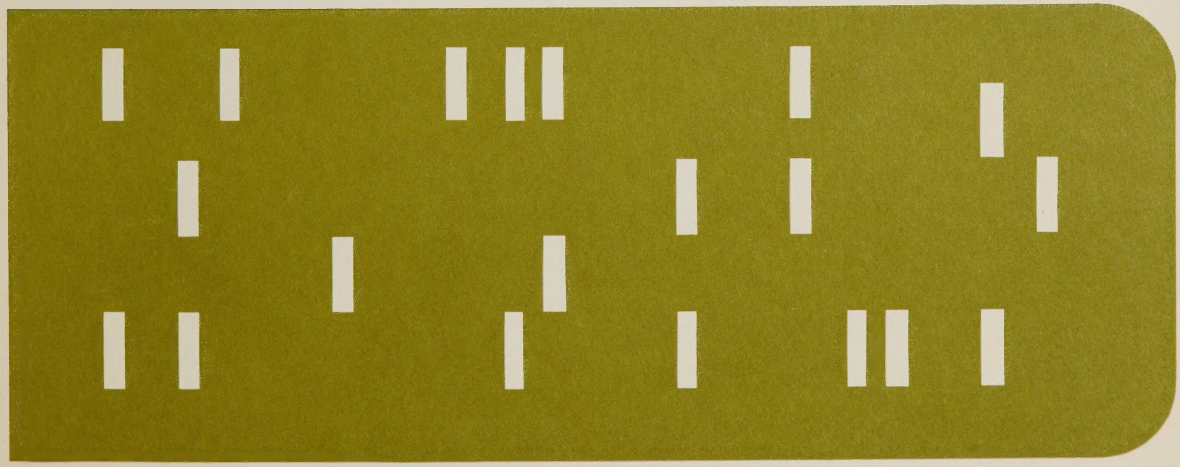
DOING BUSINESS IN CANADA

CONSTRUCTION AND EQUIPMENT STANDARDS



DEPARTMENT OF INDUSTRY, TRADE AND COMMERCE
OTTAWA, CANADA

DOING BUSINESS IN CANADA

Construction and Equipment Standards

Prepared by
Industrial and Trade Enquiries Division
Office of Promotional Services
Department of Industry, Trade and Commerce
Ottawa

FOREWORD

The information in this text deals with construction and equipment standards. Every effort has been made to accurately reflect the legislation in force at the time of preparing the material. It is believed that the text will prove to be a useful guide.

It should be appreciated, however, that many of the laws and their administration contain a considerable amount of detail. Since the text does not do more than refer to basic principles, it is suggested an enquirer should consult with relevant authorities or solicitors of his choice or both when seeking precise and detailed advice on a given problem at a specific time.

Other publications available from the Department of Industry, Trade and Commerce and included in the complete series "Doing Business in Canada" are:

The Canadian Environment
Forms of Business Organization in Canada
Canadian Customs Duties
Taxation — Income, Business, Property
Taxation — Sales, Excise, Commodity
Labour Legislation
Federal Incentives to Industry
Patents, Copyrights and Trade Marks
Tariff Preferences for Canadian Goods Abroad

Also available:

Financing Canadian Industries

Queen's Printer for Canada, Ottawa, 1970

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FACTORIES AND COMMERCIAL BUILDINGS

The erection or alteration of a building for use as a factory is normally subject to provincial government control. Drawings and specifications must be submitted to the provincial Department of Labour for approval. Similar requirements may apply to the erection or alteration of a building to be used as a retail outlet, restaurant, office, etc.

The next step is to secure a municipal building permit. Such permits are usually issued only when provincial approval has been obtained. Construction must be carried out in accordance with local building by-laws.

Boilers and pressure vessels must be approved before being installed. Designs must be submitted to the provincial Department of Labour (Public Utilities Commission in Prince Edward Island) for approval and registration before construction is commenced. Inspection is undertaken during construction, installation, initial operations and annually thereafter. Provincial authorities will usually accept the inspection of their counterparts in the area in which the boilers or pressure vessels were constructed.

Many provincial authorities have adopted the CSA Code B51, "Code for the Construction and Inspection of Boilers and Pressure Vessels", issued by the Canadian Standards Association. The CSA B51 Code is intended to provide for the safe design, construction, installation, operation and repair of boilers, pressure vessels, and related equipment, as well as to promote uniform requirements amongst the provinces. It is suggested that the provincial authorities, even though having adopted the B51 Code, should be consulted as to the intent of such adoption, as the Code may have been adopted with exemptions or with additional requirements.

Regulations are also in force in most provinces with regard to elevators and hoists. Equipment is subject to inspection by provincial labour officials.

The Canadian Standards Association has issued CSA Standard B44-1966 and Supplement No. 2-1968, "Safety Code for Elevators, Dumb-waiters, and Escalators", to meet a desire for uniform legislation throughout the various provinces. The purposes of CSA Standard B44 are to provide reasonable safety for those persons who come in contact with elevators, dumb-waiters and escalators, by establishing minimum standards for design, installation and maintenance; and to provide a uniform standard for adoption by provincial authorities throughout Canada. It is also intended as a standard reference for the use of architects, consulting engineers, elevator manufacturers, and owners.

An employer must usually forward notice to his provincial Department of Labour when undertaking to occupy a factory. The notice must contain information as to the name of his firm, the location of the plant, the nature of the work, and the amount of motive power to be used.

Premises must be maintained so that they are structurally sound and in a safe condition. Where provincial authorities consider that machinery, construction, etc., is or could be a source of danger to health or safety of an employee or of persons having access to a factory, they can so notify the employer or owner and direct him to take measures to counteract or eliminate the danger.

BUILDING CODES

Building Codes are intended primarily to ensure the structural adequacy and fire safety of buildings and to prevent the development of health hazards. Responsibility for some aspects of building construction such as electrical work, plumbing, and construction safety is retained by the provinces who enforce their regulations in these matters. However, the responsibility for developing by-laws in most aspects of construction is entrusted by the provinces to municipalities.

Canada's municipalities have the authority under appropriate Provincial Statutes to prepare or adopt building regulations as their local building by-laws. The Associate Committee on the National Building Code of Canada of the National Research Council issues a model building by-law entitled "National Building Code of Canada", which has been adopted in whole or in part by over ninety percent of Canada's cities and over sixty percent of its towns. The National

Building Code is an advisory document only, having no legal status unless a municipality adopts it as its official building by-law. The Associate Committee provides this service in the interest of establishing uniform building regulations across Canada. It is accepted that any building designed in accordance with the contents of the National Building Code will be accepted in those municipalities which have not yet adopted this document.

The National Building Code is constantly being revised by committees of people experienced in construction and related industries and a new edition is published at five-year intervals.

As well as meeting pertinent provincial regulations and municipal by-laws, new construction may also have to meet other standards. For example, Central Mortgage and Housing Corporation has prescribed the National Building Code, including Supplement No. 5, entitled "Residential Standards, Canada", as the standards applicable for all buildings financed under the National Housing Act. This means that where a municipality has adopted the Code there is no conflict between the housing requirements of the local building by-law and any housing project sponsored by Central Mortgage and Housing Corporation. "Residential Standards" has been expanded to include requirements for one, two and three storey apartment buildings as well as for houses. Where an apartment building exceeds three storeys in height, the user is then referred to the parent National Building Code.

A new addition to the National Building Code is its Supplement No. 7, "Building Standards for the Handicapped". This is written in a rather permissive style and is intended to permit the design of any building for use by the physically handicapped person, with emphasis on the wheelchair patient. Designers and building officials at all levels of government are encouraged to consider the contents of Supplement No. 7 in the design of all buildings used by the public, such as libraries, assembly halls and theatres.

A special and separate supplement to the Code has been issued entitled "Farm Building Standards". It contains all those requirements for the design and erection of farm buildings. This document includes regulations relating to barns, silos, grain storage buildings, fruit storage buildings and waste disposal lagoons among other things.

Most municipalities also have zoning by-laws which are intended to protect established areas from unwanted changes in land use and to guide or control the development of new areas. Where such regulations are in existence, building locations must be discussed with municipal officials before a building permit can be obtained. These permits serve a dual purpose. As well as regulating the siting of various buildings, they provide a means of bringing new construction to the attention of the local building inspector responsible for enforcing municipal building by-laws.

Although the National Building Code and its Supplement No. 5 on Residential Standards are based on well established traditional construction techniques and materials, provision is made for acceptance of new techniques, materials and building equipment providing they meet basic performance requirements of the Code. The building official responsible to a municipal council for administration of local building regulations would have to be satisfied that any new system or material was acceptable. For work financed under the National Housing Act, Central Mortgage and Housing Corporation reviews and may accept proposals incorporating new techniques or materials and publishes a list of acceptances under the title "Acceptable Building Materials, Systems and Equipment". Enquiries concerning acceptance of new materials, systems and methods should be directed to:

The Chief Engineer,
Central Mortgage and Housing
Corporation,
Head Office,
Montreal Road,
Ottawa 7, Ontario.

PLUMBING CODES

Provincial codes in connection with plumbing have been drafted as a means of assisting municipalities. These are usually based on the plumbing standards set out in the National Building Code. In most cases, they do not have the force of law until such time as local authorities pass pertinent by-laws. In Ontario, the plumbing code has been established on a province-wide basis and is mandatory in every municipality of that province.

Where plumbing by-laws have been enacted, fees are charged for each inspection, and approval of the installation must be obtained before the system can be used.

ELECTRICAL INSTALLATION

Electrical installation must conform to the provisions of CSA Standard C22.1, Canadian Electrical Code, Part 1. This Standard has been adopted and has the force of law in all provinces.

ELECTRICAL APPARATUS AND EQUIPMENT

Electrical apparatus and equipment offered for sale in Canada must be CSA certified.

The Canadian Standards Association is an autonomous non-government body, established for the purpose of developing uniform nation-wide standards on products, processes and procedures. The standards developed are published as recommended good practice; acceptance remains voluntary until such time as the standards receive force of law through appropriate legislation by provincial or municipal authorities. A listing of the standards that have been developed can be obtained from the General Manager, Canadian Standards Association, 77 Spencer Street, Ottawa 3.

All provinces have enacted legislation requiring that electrical equipment comply with CSA standards. In Ontario, for example, a dealer selling sub-standard equipment would be liable to a fine ranging from $10.00 to $50.00. Regulations prohibit advertising, selling, renting or transferring ownership or possession where electrical equipment has not been certified by the CSA. Other provinces have similar regulations. Usually a dealer buying electrical merchandise will insist the terms of sales include a warranty that the equipment meets CSA standard.

Applications for the CSA certification of electrical equipment may be made in person or in writing to the CSA Testing Laboratories, 178 Rexdale Blvd., Rexdale, Ontario, or to the CSA District Office in the location concerned. United Kingdom manufacturers should address their communications to B.S.I./CSA Agency, British Standards Association, Maylands Avenue, Hemel Hempstead, Herst, England; European manufacturers — N.V. tot Keuring van Electrotechnische Materialen (KEMA), Utrechtseweg 310, Arnhem, The Netherlands; Japanese manufacturers—Japan Machinery and Metal Inspection Institute, 7-3 Akasaka-Tamachi, Minato-Ku, Tokyo, Japan.

An application form will be furnished, and when completed and returned, together with a specified initial deposit (to be applied against the costs of a laboratory investigation, report, and promulgation or certification), work will be initiated according to the schedule of jobs on hand.

Samples must be delivered as directed, to the specified testing laboratory with all carriage, customs, brokerage and other charges prepaid. The samples will be inspected and/or tested to determine whether they conform to requirements. Should the final decision be favourable, the applicant will be asked to accept the CSA Follow-up Inspection Service.

The Follow-up Inspection Service, involving an annual fee, is carried out by means of periodic tests and/or inspection by an inspector at the factory; by observation of the certified equipment in service, and/or by the tests at laboratory on samples submitted, or purchased in the open market.

WEIGHING AND MEASURING DEVICES ELECTRICITY AND GAS METERS

The production and/or sale of weighing and measuring equipment, electricity and gas meters, for commercial use is controlled in Canada under legislation administered by the Standards Branch of the Department of Consumer and Corporate Affairs, Ottawa. Before sale and use, prototypes and specifications must be submitted to the laboratory of the Branch for inspection and test. The results are considered, and the equipment is either approved and listed, or rejected, as the circumstances warrant. All such equipment is subject to periodic inspection during its lifetime.